Title (en)

HOMOGENOUS SILICA-TITANIA GLASS

Title (de)

HOMOGENES SILICA-TITAN-GLAS

Title (fr)

VERRE HOMOGÈNE DE SILICE-TITANE

Publication

EP 4328201 A1 20240228 (EN)

Application

EP 23193567 A 20230825

Priority

- US 202263401334 P 20220826
- NL 2033057 A 20220916

Abstract (en)

A glass comprising titania and silica is disclosed. A plot of average hydroxide concentration of each segment of a plurality of segments vs. distance along the glass is provided by: y = Ax² + Bx + C, wherein A (in ppm/mm²) is in a range from about 0.0 to about -0.1, B (in ppm/mm) is in a range from about -10 to about 10, C (in ppm) is about 150 or less, y is the average hydroxide concentration (in ppm), and x is distance (in mm) such that the hydroxide concentration of each segment is measured using a Fourier transform infrared spectroscopy in transmission and the plot extends a distance of about 50 mm or more along the glass.

IPC 8 full level

C03C 3/06 (2006.01); **C03C 3/076** (2006.01); **G03F 1/60** (2012.01)

CPC (source: EP US)

C03C 3/06 (2013.01 - EP); **C03C 3/076** (2013.01 - EP US); **G03F 1/00** (2013.01 - US); **G03F 1/60** (2013.01 - EP); **G03F 7/70958** (2013.01 - EP); C03C 2201/23 (2013.01 - EP); C03C 2201/42 (2013.01 - EP)

Citation (applicant)

- US 9580350 B2 20170228 - ANNAMALAI SEZHIAN [US], et al
- DAVIS ET AL.: "Quantitative infrared spectroscopic measurement of hydroxyl concentration in silica glass", J. NON-CRYSTALLINE SOLIDS, vol. 203, 1996, pages 27 - 36, XP004079720, DOI: 10.1016/0022-3093(96)00330-4

Citation (search report)

- [X] US 2015259239 A1 20150917 - ANNAMALAI SEZHIAN [US], et al
- [X] US 9932261 B2 20180403 - ANNAMALAI SEZHIAN [US], et al
- [X] EP 2247544 B1 20140423 - ASAHI GLASS CO LTD [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4328201 A1 20240228; US 2024067558 A1 20240229; WO 2024044091 A1 20240229

DOCDB simple family (application)

EP 23193567 A 20230825; US 2023030452 W 20230817; US 202318235934 A 20230821